

**SUPPORTING STATEMENT  
PROFILES OF FISH PROCESSING  
PLANTS IN ALASKA  
OMB CONTROL NO. 0648-xxxx**

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

**1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.**

The potential respondent universe includes plant managers from the 186 shore-based fish processing facilities (located in 64 Alaskan communities) which filed Intent to Operate paperwork in the year 2010. These fish processing facilities include plants with the following Alaska Department of Fish and Game processor and buyer codes: SBPR (Shorebased Processor), EXBY (Buyer/Exporter), IBYO (Independent Buyer), and IFSP (Inshore Floating Stationary Processor). These codes were chosen in order to ensure that all fish processing facilities based in Alaskan communities are included in the respondent pool.

Due to the low number of processing plants, a census of the population will be attempted. A census is also necessary in order to obtain the same set of unique information about each fish processing plant for use in revising the 2005 community profiles (Sepez et al. 2005).

Potential respondents are identified as the processing plant managers for each fish processing facility. Respondents will be called on the phone to complete the survey. The data collected will be supplemented with internet sources, including the associated fish processing company websites and the Alaska Seafood Marketing Institute's website.

According to Bourque and Fielder (2003: 15), non-commercial telephone surveys that are rigorously conducted have achieved response rates above 70%; whereas some marketing firms have reported response rates for commercial surveys at a rate as low as 12%. Bernard (2006: 261) states that with phone surveys, a refusal rate of 30% to 40% can be expected. A level of response on the higher end (similar to that given by Bernard and given for rigorously conducted surveys by Bourque and Fielder) for the proposed data collection is expected because the sample for this survey includes targeted businesses rather than members of the general public. Also, an organized shore-based fish processing association, Pacific Seafood Processors Association (PSPA) has offered to encourage their member processing plants to take part in the survey. PSPA members include 26 of the largest shore-based plants included in the respondent population. Based on the specific nature of the sample population for this study and the fact that we have received buy-in from members of that population, we expect a final response rate of up to 70%, leading to a maximum of 130 surveys being completed.

**2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

The survey instrument submitted for approval with this supporting statement was finalized in January 2011 after significant input from survey design experts and cognitive interviews with processing industry representatives. The survey was developed and revised through extensive collaboration with PSPA.

Implementation of the survey will follow a modified version of the phone survey administration method described by Rea and Parker (1997: 70-74), Dillman's Tailored Design Method (Dillman 2009: 234-271) when deemed appropriate for phone surveys, and methods suggested by members of the processing sector that were consulted in the design of the survey (i.e., Q8-Q10 in the survey may require plant managers to consult their records and it was suggested that AFSC social scientists should offer another phone call at a later time to gather the information). Rea and Parker focus specifically on the methods of telephone surveys/interviews and they describe specifics about such topics as interviewer training, minimizing interviewer bias, collecting answers to questions, dealing with busy phone lines, and missing answers to questions (1997: 70-74).

The modified process which will be used includes an advance letter to respondents that will be contacted to take part in the survey, an initial telephone call (during which the survey will be conducted if convenient for the participant), a secondary telephone call (if the respondent is not available to complete the questionnaire during the initial call), a third telephone call (if necessary, to complete questions Q8-Q10), and a follow-up call (if necessary, to fill in gaps).

The survey will be a census of 186 shore-based fish processing plants, as described in Part B Question 1, above. A statistical methodology for sample selection was not needed given that a census of the population is being attempted.

The method of data collection will be a questionnaire which will be administered for the most part over the telephone, but will be administered in person in the site-visit communities of Kenai, Petersburg, and Cordova. The phone numbers and addresses of processing plants will be obtained from publicly available Intent to Operate listings from the Alaska Department of Fish and Game.

The full survey implementation procedures are as follows:

#### Phone Survey

1. An **advance letter** will be mailed to participants that will be recruited to take part in the phone survey portion. This will be the first contact with the respondent pool.
2. A **telephone recruitment call** will be made 5-7 days after the advance letter is sent to conduct the survey over the phone or make arrangements to complete the survey in the following few days. The survey will be completed at the time of the recruitment

- call if convenient for the participant or an alternate time will be scheduled for completion of the survey over the phone. Where necessary, only questions that do not require the consultation of ones records to answer (Q1-Q7) will be completed during the original call and the remainder of the survey will be completed at an alternate time over the phone or provided over email to AFSC social scientists. This step will be completed a total of 3 times before the phone number is classified as “non-response.” Another **telephone recruitment call** will be made at another time if the respondent is not available at the time of the first call.
3. A **second telephone call** will be made at a scheduled time set with the respondent to conduct the survey (in some cases this may be the first contact, with the survey taking place if the respondent is available at this time and willing to participate).
  4. A **third telephone call**, if necessary to complete the remainder of the survey questions that might require participants’ consultation of records.
  5. A **follow-up telephone call** immediately after the survey is completed, if necessary. This phone call will fill in gaps caused by missed questions, unclear open-ended responses, and general legibility.

#### Site-Visit Survey

1. A **telephone recruitment call** will be made to plant managers 3-4 weeks before the desired site-visit date to recruit respondents and arrange a time to conduct the survey in person.
2. An **in person survey** will be conducted at a scheduled time with the respondent.

This collection of information will be gathered only once; however, it is likely that this collection will be completed again in the year 2020 (as explained above in Part A, Question 2).

**3. Describe the methods used to maximize response rates and to deal with non-response. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.**

Numerous steps have been, and will be, taken to maximize response rates and deal with non-response behavior. These efforts are described below.

#### **Maximizing Response Rates**

The first step in achieving a high response rate is to develop a survey instrument that is easy for respondents to complete. Significant effort has been spent on developing a good survey instrument. Experts in survey design and who work with Alaskan fishing communities on a regular basis were asked to review the draft survey instrument and provide comments on the wording of questions, additional questions to include, question order effects, question structure and response categories. The current survey instrument also benefited from input on earlier versions provided in two cognitive interviews as well as from input provided from PSPA who chose to present the survey to three of their member organizations who provided comments on

the survey. Cognitive (one-on-one) interviews were used to ensure the survey instrument used words and terms people could understand, and was a comfortable length and easy to answer.

The implementation techniques that will be employed are consistent with methods that maximize response rates. As described in Part B, Question 2 above, implementation of the phone survey will follow a modified version of the phone survey administration methods described by Rea and Parker (1997) and Dillman et al. (2009), as well as methods suggested by fish processing industry members. Methods for the site-visit surveys include calling 3-4 weeks beforehand to arrange a time to conduct the survey in person. This will be done in order to ensure that the time of the visit will correspond with a time that does not interfere with processing activities.

The importance and benefits of this data collection project will be emphasized in the advance letter and telephone contacts. In these letters and phone contacts, the investigators will state that the community profiles (in which the processor profiles will be included) continue to be important sources of information for fisheries managers when making important decisions that could affect the processing plants. Making a clear link between the survey, their participation, and the importance of the community profiles is expected to help increase the response rate even further. Also, PSPA will encourage their member organizations to take part in the survey. PSPA members include some of the largest processing facilities in Alaska and it is a very influential organization in the industry. It is estimated that with their support and backing, the response rate will increase for their member organizations and also perhaps for those facilities that are not members of PSPA, but which may be more inclined to participate because PSPA has expressed support for the survey.

### **Non-response**

To better understand why some respondents are not willing to complete the survey and to determine if there are systematic differences between those processing plants that choose to participate in the survey and those that do not, a list of those which do not choose to take part in the survey will be kept and any reasons given for why they do not wish to take part in the survey will be recorded. A demographic comparison will also be completed by examining the size of fish processing plants using total fish landings as a proxy for size of fish processing plant (since the number of employees is not available).

### **4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.**

A formal pretest of procedures and methods was not undertaken for this project, given the small number of respondents in the population and because a census will be undertaken during the full survey implementation. However, the survey instrument was evaluated and revised using input from cognitive interviews conducted with the Vice President of PSPA (who chose to present the draft survey to three of their member organizations who also evaluated the survey and presented suggested edits), as well as with another potential respondent at processing facility, a member of Icicle Seafoods. The survey design and implementation plan have also benefited from review by

individuals with expertise in socio-economic survey design and implementation in fishing communities.

**5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

An internal peer review of the survey instruments was conducted which included grammatical, clarity, design, and statistical review. NMFS federal staff that reviewed the survey instruments includes:

Dr. Amber Himes-Cornell  
Social Scientist - Alaska Fisheries Science Center  
(206) 526-4221

Dr. Dan Lew  
Economist - Alaska Fisheries Science Center  
(530) 752-1746  
Dan.lew@noaa.gov

Dr. Jennifer Sepez  
Anthropologist - Alaska Fisheries Science Center  
(206) 526-6546

Christina Package  
Contractor at Alaska Fisheries Science Center  
Pacific States Marine Fisheries Commission (PSMFC)  
(206) 526-6683

The individuals who will ultimately collect and analyze the information are Christina Package and PSMFC Contractor; Dr. Amber Himes-Cornell, AFSC Social Scientist; and an additional contractor for the project, if necessary.

## References

- Bernard, H. R. 2006. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. 4<sup>th</sup> ed. Lanham: Altamira Press.
- Bourque, L. and E. Fielder. 2003. *The Survey Kit: How to Conduct Telephone Surveys*. 2<sup>nd</sup> ed. Thousand Oaks: Sage Publications.
- Dillman, D., J.Smyth, and L.Christian. 2009. *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. 2<sup>nd</sup> ed. New York: John Wiley & Sons, Inc.
- Hall-Arber, M., C. Dyer, J. Poggie, J. McNally, and R. Gagne. 2001. *New England's Fishing Communities*. Revised version of the final report for Northeast MARFIN grant #NA87FF0547.
- Rea, L. and R. Parker. 2005. *Designing and Conducting Survey Research: A Comprehensive Guide*. 3<sup>rd</sup> ed. San Francisco: Jossey-Bass.
- Sepez, J. A., B. D. Tilt, C. L. Package, H. M. Lazrus, and I. Vaccaro. 2005. *Community Profiles for North Pacific Fisheries - Alaska*. U. S. Dep. Commerce, NOAA Tech. Memo. NMFS-AFSC-160, 552 p.
- Warren J. and J. Hadland. "Employment in Alaska's Seafood Industry". *Alaska Economic Trends*. November 2009.